

Remarks

Applicants would like to thank the Examiner in this case for his courtesy in conducting telephonic interviews to discuss claim amendments in this case. The response submitted here is a result of these discussions. Claims 82-83 have been canceled and rewritten as new claims 84-89. Dependent claims have been amended as to dependency and added as necessary. No new matter is added.

The previous claims were considered both unclear and overbroad for use of the term "derivative" or "derivitization" with respect to peptides, since the specification indicated that this term referred to both chemical derivitization of reactive groups on the amino acids of the peptide and to peptides having "essentially equivalent specificity," potentially including different and undisclosed amino acid sequences. It therefore may have been unclear whether the term derivative used in a claim might refer to the chemical addition of additional amino acids or peptides to the derivatized peptide.

The present claims now are drawn to complexes with peptides of particular recited amino acid sequences or fragments thereof, to these same recited sequences wherein a reactive backbone and/or amino acid side group of said peptide has been derivatized by a chemical reaction, and to these same recited sequences wherein at least one amino acid of said peptide is replaced with a homolog of said amino acid selected from the group consisting of 4-hydroxyproline, 5-hydroxylysine, 3-methyl histidine, homoserine, ornithine, β -alanine and 4-aminobutyric acid. The claims have been rewritten as separate independent claims at the request of the examiner for the sake of clarity and readability.

Support for these amendments can be found in the paragraph that bridges pages 8 and 9, therefore no new matter is added by these amendments. Moreover, no new search would be required for these amended claims because in every case the sequence is limited to the recited SEQ ID numbers and does not include any additional amino acid sequences added to the N- or C-terminal of the named sequence. Applicants submit that any person of skill in the art is knowledgeable about chemical derivation of reactive groups which are present on the amino acids of a peptide sequence and homologs of the twenty standard amino acids as recited. This, coupled with the guidance provided in the specification, provides more than enough information for the skilled person to recognize that Applicants had possession of the claimed invention and to enable the practice of the claims in their full scope. Applicants believe that these amendments overcome the previous rejections.

For the reasons discussed above, Applicants submit that the amended claims are fully supported by the original specification as filed under the standards of 35 U.S.C. §112 and therefore request that the rejection of the claims of this application be withdrawn. If any issues remain outstanding, the Examiner is requested to telephone the undersigned.

Respectfully submitted,

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